

#### UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/324,308	06/02/1999	STEPHEN MICHAEL MATYAS JR.	5577-159	1364
20792 7	7590 04/23/2003			
MYERS BIGEL SIBLEY & SAJOVEC			EXAMINER	
PO BOX 37428			LANIER, BENJAMIN E	
RALEIGH, NO	C 27627			
			ART UNIT	PAPER NUMBER
			2132	9
			DATE MAILED: 04/23/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Pre				
	Application No.	Applicant(s)				
Office Action Summary	09/324,308	MATYAS ET AL.				
omec Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication one	Benjamin E Lanier	2132				
The MAILING DATE of this communication app Period for Reply	ears on the cover sneet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1)☐ Responsive to communication(s) filed on						
	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4)⊠ Claim(s) <u>1-57</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5,9-19,22-31 and 35-57</u> is/are reject	ed.					
7) Claim(s) <u>6-8,19-21 and 32-34</u> is/are objected to	<b>)</b> .					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on <u>02 June 1999</u> is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) ☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.5</li> </ol>	5) Notice of Informal Page	(PTO-413) Paper No(s) atent Application (PTO-152)				

#### **DETAILED ACTION**

## Response to Amendment

1. Applicant's amendments to the claims and the specification have been fully considered.

### Response to Arguments

2. Applicant's arguments see paper 7, pages 15-21, filed February 28<sup>th</sup>, 2003, with respect to the rejection(s) of claim(s) 1-5,9-18,22-31 and 35-57 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Austin, U.S. Patent No. 4,944,007.

# Claim Rejections - 35 USC § 101

- 3. 35 U.S.C. 101 reads as follows:
  - Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
- 4. Claims 1, 14, 27, 40, 46, 52 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention fails to define a useful tangible result with regards to the user specific information and the entity specific information. The cited claims define a claimed invention with regards to the user specific information and the entity specific information that is abstract in nature.
- 5. Claims 40-43 and 46-49 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention is not limited to the technological arts because the claimed invention is abstract in nature.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- Claims 1-5, 9, 14-18, 22, 27-31, 35, 40, 44-46, 50-52, 56, and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Austin, U.S. Patent No. 4,944,007. Referring to claims 1-5, 9, 14-18, 22, 27-31, 35, 40, 44-46, 50-52, 56, and 57, Austin discloses a public key diversification system wherein a member requests a key by imputing the member ID and two prime numbers are selected (select primes from user specific range)(Fig. 3). These primes are used in conjunction with two other primes to complete the key generation.

# Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 10, 11, 23, 24, 36, 37, 41, 42, 47, 48, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin, U.S. Patent No. 4,944,007, in view of Tomko, U.S. Patent No. 5,680,460. Referring to claims 10, 11, 23, 24, 36, 37, 41, 42, 47, 48, 53, and 54, Austin discloses a public key diversification system wherein a member requests a key by imputing the member ID and two prime numbers are selected (select primes from user specific range)(Fig. 3). These primes are used in conjunction with two other primes to complete the key generation. Austin does not disclose that the user specific information is biometric information.

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Tomko discloses a user inputting finger print data at the time the user wishes to create a key (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use biometric data in the public key diversification system of Austin in order to provide an extremely secure private key which is not even known by the user yet is readily accessible as taught in Tomko (Col. 2, lines 17-20).

- 10. Claims 12, 13, 25, 26, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin, U.S. Patent No. 4,944,007, in view of Jablon, U.S. Patent No. 6,226,383. Referring to claims 12, 13, 25, 26, 38, and 39, Austin discloses a public key diversification system wherein a member requests a key by imputing the member ID and two prime numbers are selected (select primes from user specific range)(Fig. 3). These primes are used in conjunction with two other primes to complete the key generation. Austin does not disclose selecting a random point as a starting point for a prime number search. Jablon discloses cryptographic methods where a random point of prime order is chosen. If the starting point is determined to be out of the prescribed range then another value is chosen as the starting point. This starting point is used as the basis for the calculation of the prime number to be selected (Col. 15, lines 49-56). It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the prime number of Austin in the manner of Jablon in order to increase computational efficiency as taught in Jablon (Col. 14, lines 24-29).
- 11. Claims 43, 49, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin, U.S. Patent No. 4,944,007, in view of Dawson, U.S. Patent No. 5,709,114. Referring to claims 43, 49, and 55, Austin discloses a public key diversification system wherein a member requests a key by imputing the member ID and two prime numbers are selected (select primes

from user specific range)(Fig. 3). These primes are used in conjunction with two other primes to

complete the key generation. Austin does not disclose using company identification as the entity

specific information. Dawson discloses an electronic lock system where a key to the lock

contains three elements: personal identifier, company identifier, and authorization level (Col. 4,

lines 57-62). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use company identification information as the entity specific information

in Austin so that a company could generate keys unique to them.

Allowable Subject Matter

12. Claims 6-8, 19-21, and 32-34 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Benjamin E Lanier whose telephone number is (703)-305-7684.

The examiner can normally be reached on M-Th from 7:30am to 5:00pm, F from 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gilberto Barron, can be reached on (703)-305-1830. The fax phone number for the

organization where this application or proceeding is assigned is (703)-746-7239, after final

(703)-746-7238, or non-official/draft (703)-746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is 703-305-3900.

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